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DRAFT TECHNICAL REPORT NO. 4

PHASE 3 STAGE 3C

SELECTION OF PREFERRED SITE

AGRICULTURAL ASSESSMENT

ECOLOGICAL SERVICES FOR PLANNING LTD.

URBAN DOCUMENTATION CENTRE
RESEARCH UNIT FOR URBAN STUDIES
MCMASTER UNIVERSITY
HAMILTON, ONTARIO

ENVIRONMENTAL ASSESSMENT
LANDFILL COMPONENT OF SOLID WASTE MANAGEMENT

JANUARY 1985

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SUMMARY

This report outlines the agricultural impact assessment component of the "Environmental Assessment of the Landfill Component of Halton's Solid Waste Management System". The six Candidate Sites selected in Stage 2B were evaluated during Stage 2C. A Site Plan Area, defined as the actual site area required to accommodate the long term soild waste requirement, was identified during the Stage 2C analysis. Four sub-factors, including Long-Term Agricultural Viability, Land Quality, Large Contiguous Blocks of Agricultural Land and Special Farm Enterprises were used in the agricultural assessment for Stage 2C.

Long-Term Agricultural Viability was considered the most important sub-factor (Level 1) and each Site Plan Area was ranked accordingly. The ranking produced two groups as follows:

- relatively low impact - A,B,C,F (most preferred for a landfill site).
- relatively high impact - D, E (least preferred for a landfill site).

The Site Plan Areas were then ranked according to the remaining sub-factors (Level 2), which were given equal weighting. The cumulative ranking obtained on the basis of Land Quality, Large Contiguous Blocks of Agricultural Land and Special Farm Enterprises provides a comparative evaluation of conditions existing on each Site Plan Area.

The ranking obtained from Level 2 sub-factors is as follows:

Site Plan Area	Ranking
A	MHM
B	MLM
C	HLM
D	MML
E	HHM
F	LLL

By combining all the sub-factors, the following ranking of the Site Plan Areas is obtained in ascending order of preference:

Site Plan Area
F
B
C
A
D
E

1.0 INTRODUCTION

This report presents a detailed evaluation of the six candidate sites selected in Phase 2, Stage 2B. The agricultural analysis is based on the Site Plan Areas which were identified during Stage 2C as the actual area for landfilling within the Candidate Sites. In the case of Site F, the Candidate Site will be used in the landfill conceptual design and operations. The agricultural analysis is based on factors consistent with earlier stages of the overall Environmental Assessment of Halton's landfill component. Each Site Plan Area is rated according to the factors, and a final ranking of Site Plan Areas based on their relative impact on agriculture is presented.

The evaluation also includes a detailed review of the Food Land Guidelines (see Technical Report on Land Use and Planning Assessment) to ensure that the agricultural impact analysis and site selection process is consistent with provincial policy. Public concerns and agency comments from ongoing participation in Stage 2C are also incorporated into the report. General mitigation measures and design specification for site restoration to an agricultural after-use are discussed as a basis for conceptual design.

2.0 METHODOLOGY

2.1 Sub-Factors for Site Plan Area Comparison

The sub-factors used in evaluating the Site Plan Areas include Long Term Agricultural Viability, Land Quality, Contiguous Blocks of Agricultural Land and Special Farm Enterprises.

The sub-factors were assigned the following priorities:

Level 1 - Long Term Agricultural Viability

Level 2 - Combination of Land Quality, Contiguous Blocks of Agricultural Lands, and Special Farm Enterprises. Each of these three factors were treated as having equal weight and the Site Plan Areas were rated accordingly.

Long Term Agricultural Viability was given a Level 1 ranking since it addresses the issue of future potential of agricultural production within the surrounding area and reflects recent planning initiatives and development trends. The Level 2 group of sub-factors provides a direct comparison of on-site conditions among the Site Plan Areas.

2.2 Agency Meetings

Meetings were arranged with representatives from the Ontario Ministry of Agriculture and Food (O.M.A.F.) and the Halton Agricultural Advisory Committee (H.A.A.C.) to solicit input on the sub-factors to be applied and studies to be undertaken in Stage 2C. Refinement of the agricultural sub-factors was discussed with O.M.A.F. in June 1984, and with H.A.A.C. in July 1984. On November 6, 1984, the preliminary findings of the agricultural analysis from Stage 2C of the project were presented to H.A.A.C.

2.3 Site Surveys

Background information was derived from field surveys, the Halton County Soil Report, the Canada Land Inventory, Soil Capability for Agriculture

mapping, Enumeration Area data from Statistics Canada and data from assessment rolls and maps.

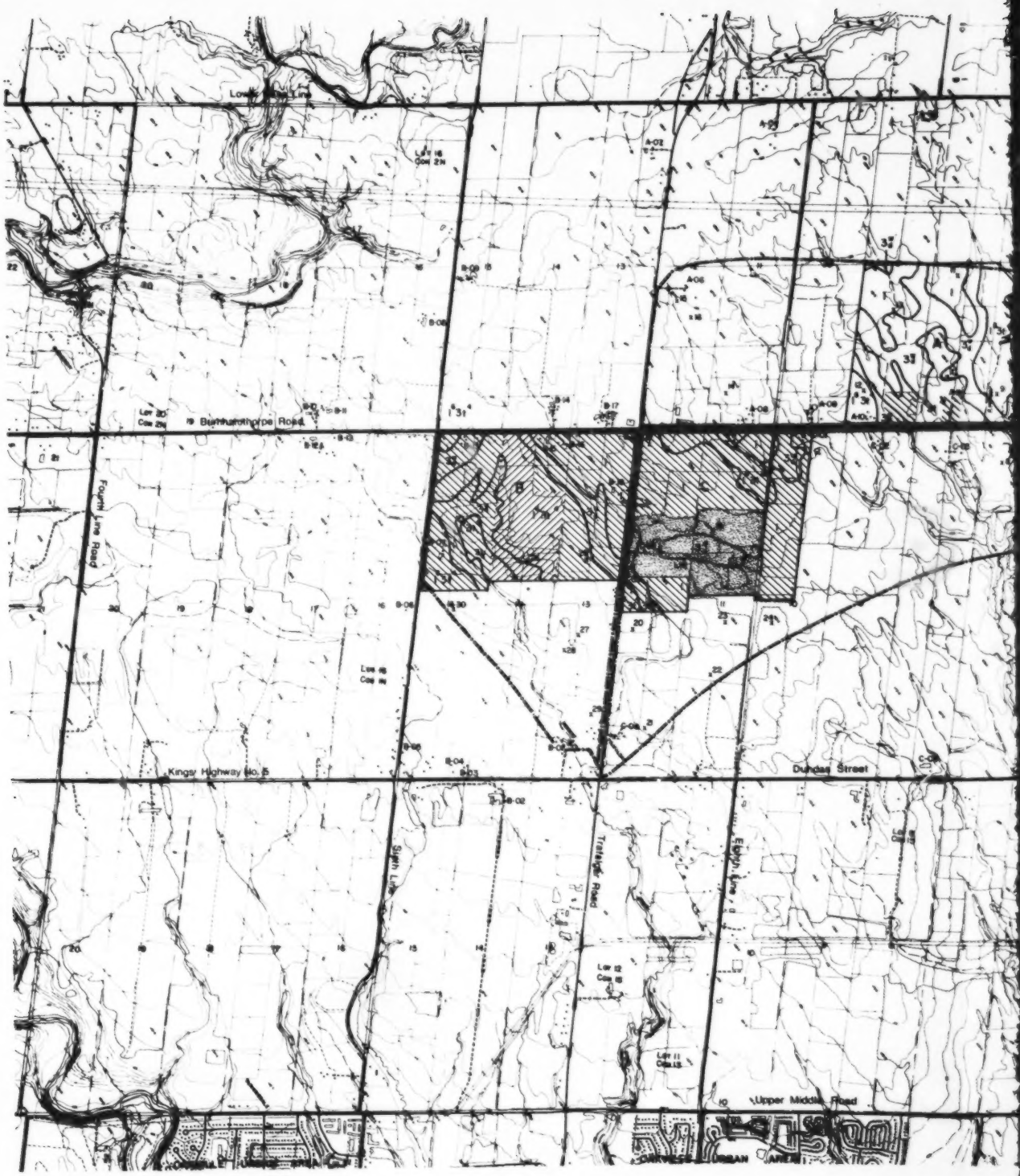
A soil survey of the candidate sites A, B, C, D and E was conducted in June 1984. The purpose of the survey was to verify the existing soil and agricultural capability mapping. Soil samples were taken on land within each of the candidate sites where the landowners permitted access. Twelve soil samples were taken from Candidate Site A, seven from Candidate Site B, twelve from Candidate Site C, eight from Candidate Site D, and three from Candidate Site E. Soil survey field sheets are included in Appendix 1 for the Site Plan Areas. Candidate Site F soils were mapped during a prior study conducted by the consultant and reported to the Region of Halton on March 10, 1979. The soils analysis was based on aerial photo interpretation and on-site slope analysis in order to upgrade provincial soil mapping for the Candidate Sites.

A "windshield" survey of agricultural land use occurring within approximately 0.8 kilometres (0.5 miles) of each candidate site was also undertaken in the Summer of 1984. Information also was obtained on the farm type, ownership, farm buildings and their condition, livestock and types of crops grown.

The agricultural inventory undertaken during Stage 2C is shown on Maps 1, 2 and 3.

2.4 Public Meetings and Workshops

Public meetings and workshops were held from February 1984 to August 1984. The issues and concerns of residents in the areas surrounding the six candidate sites were summarized in the June 1984 "Interim Report on Public Concerns and Issues", by Myra Schiff Consultants Limited. Additional landowner information on Candidate Sites A, B and C was also obtained in June 1984 from C.R.O.W. (Concerned Residents over Wastes), a citizens group in the Town of Oakville.


Burhamthorpe Road
Fourth Line Road
Kings' Highway No. 5
Dundas Street
Trafalgar Road
Eighth Line
Upper Middle Road

MAP 1

LEGEND

- A-01 Farms Surveyed
- 3] Soil Capability for Agriculture
- 32 Soil Sampling Location
- Large Parcels (Non-Local Ownership; ≥50 ac.)
- Large Parcels (Local Ownership; ≥50 ac.)
- Fragmented Parcels (Existing; < 50 ac.)
- Fragmented Parcels (New, Due to Site Plan Boundary; < 50 ac.)
- Site Plan Area
- Candidate Site

Map Information Compiled By:
Ecological Services for Planning Ltd.

SOIL LIMITATIONS

- w - WETNESS
- d - STRUCTURE
- t - TOPOGRAPHY
- e - EROSION

PHASE 2, STAGE 2C
SELECTION OF PREFERRED SITE

ENVIRONMENTAL ASSESSMENT OF THE LANDFILL COMPONENT OF HALTON'S SOLID WASTE MANAGEMENT SYSTEM

Scale

Walker Wright Young Associates Limited

Derry Road
Britannia Road
Bell School Line
Trafalgar Road
Canadian National Railways
Upper Base Line
E
D

MAP 2

LEGEND

- A-01 Farms Surveyed
- 3 Soil Capability for Agriculture
- 32 Soil Sampling Location
- Large Parcels (Non-Local Ownership, ≥50 ac.)
- Large Parcels (Local Ownership, ≥50 ac.)
- Fragmented Parcels (Existing, < 50 ac.)
- Fragmented Parcels (New, Due to Site Plan Boundary, < 50 ac.)
- Site Plan Area
- Candidate Site

Map Information Compiled By:
Ecological Services for Planning Ltd.

SOIL LIMITATIONS

- w - WETNESS
- d - STRUCTURE
- t - TOPOGRAPHY
- e - EROSION

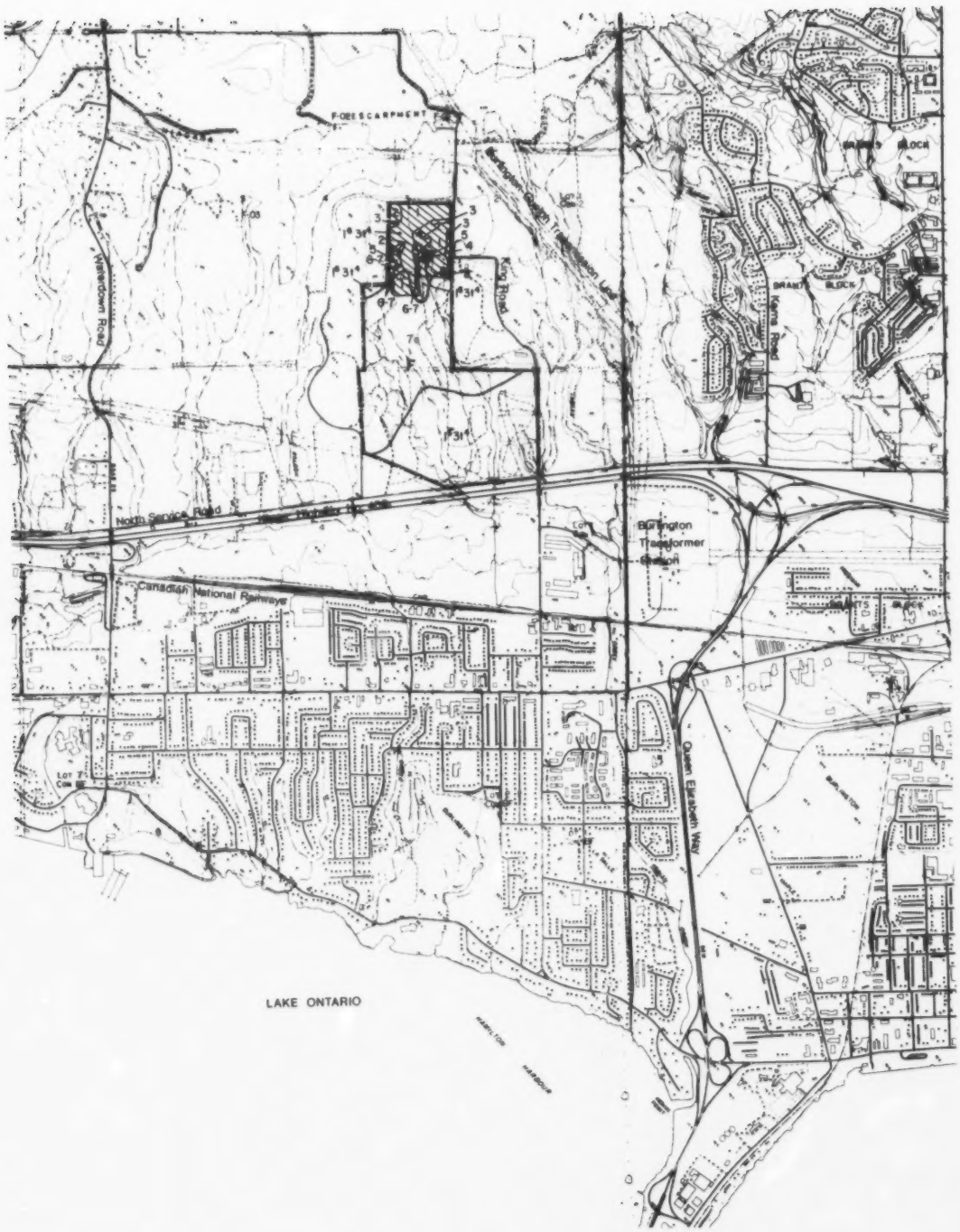
PHASE 2, STAGE 2C
SELECTION OF PREFERRED SITE

ENVIRONMENTAL ASSESSMENT OF THE LANDFILL COMPONENT OF HALTON'S SOLID WASTE MANAGEMENT SYSTEM

Scale

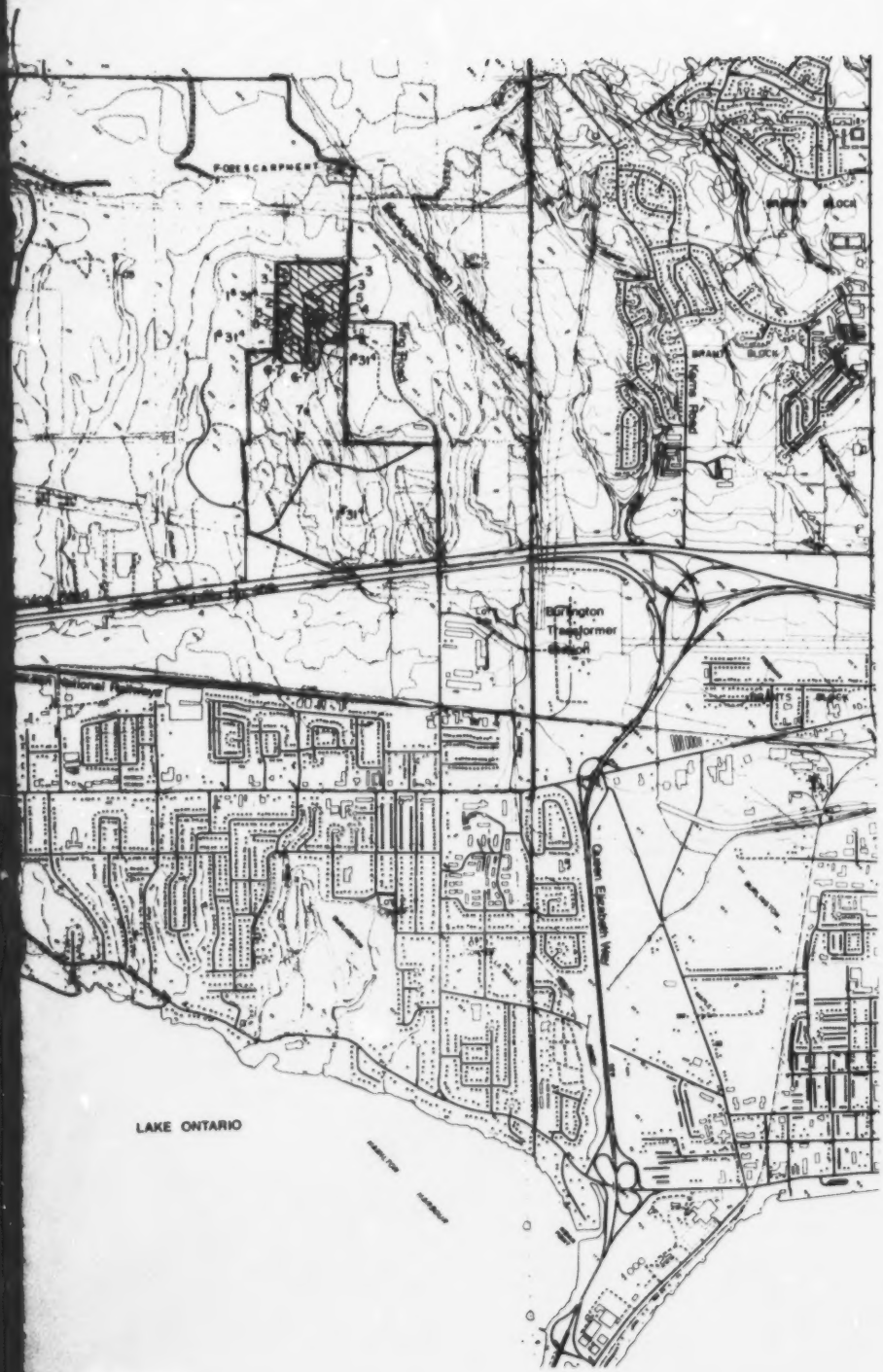
N

Walker Wright Young Associates Limited


ESCARPMENT
Waterdown Road
King Road
North Service Road
Canadian National Railways
Burlington Transformer Station
Queen Elizabeth Way
LAKE ONTARIO
HAMILTON HARBOUR

MAP

LEGEND



MAP 3

LEGEND

- A-01 Farms Surveyed
- 3[3] Soil Capability for Agriculture
- Soil Sampling Location
- Large Parcels (Non-Local Ownership; ≥50 ac.)
- Large Parcels (Local Ownership; ≥50 ac.)
- Fragmented Parcels (Existing; < 50 ac.)
- Fragmented Parcels (New, Due to Site Plan Boundary; < 50 ac.)
- Site Plan Area
- Candidate Site

Map Information Compiled By:
Ecological Services for Planning Ltd.

SOIL LIMITATIONS

- w - WETNESS
- d - STRUCTURE
- t - TOPOGRAPHY
- e - EROSION

PHASE 2, STAGE 2C
SELECTION OF PREFERRED SITE

ENVIRONMENTAL ASSESSMENT OF THE LANDFILL COMPONENT OF HALTON'S SOLID WASTE MANAGEMENT SYSTEM

Walker Wright Young Associates Limited

3.0 SITE COMPARISON AND RANKING

The relative ranking of individual Site Plan Areas from the standpoint of their agricultural impact was undertaken at two levels. The Site Plan Areas were ranked according to their Long Term Agricultural Viability which produced two groups of sites; those most preferred for landfilling, and those least preferred, and were determined through site surveys into agricultural land use, soil capability for agriculture and ownership patterns, for each Site Plan Area (Appendix B).

Within each group, the Site Plan Areas were given a relative ranking according to the combined impacts of Land Quality, Contiguous of Agricultural Lands and Specialty Farm Enterprises. Each of these latter sub-factors were given equal weight.

Long Term Viability addresses the future potential for agricultural production within the surrounding areas and reflects recent planning initiatives and development trends.

3.1 Level 1 - Long-term Agricultural Viability

Sites A, B and C are located at or near the intersection of Trafalgar Road and Burnhamthorpe Road, in the Town of Oakville; Sites D and E are located southeast of First Line and Britannia Road and northwest of Tremaine Road and Britannia Road, respectively, in the Town of Milton; and Site F is located at Highway #403 and King Road in the City of Burlington.

These sites have been placed into two relatively distinct groups based on long-term agricultural potential. Site F is situated entirely within the Parkway Belt West and lies adjacent to a quarry, an active landfill operation, major transit and utility corridors, and the urban area of Burlington. Site F has the following constraints to agricultural development:

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- the site is isolated from large contiguous blocks of agricultural lands by urban and industrial development, transit corridors, the Parkway Belt and the Niagara Escarpment;

- site access for farm machinery is along paved arterial roads such as King Road, North Service Road or the QEW;

- the majority of the site is low to moderate quality for agricultural production of common field crops;

- major ravines which originate from the escarpment face disect the area and are responsible for the small, irregular shaped fields which reduce efficient use of farm machinery; and

- several fields contain an old field complex of trees and scrubland and have not been used for agricultural production for several years.

Based on the foregoing, the future potential of Site F for agricultural production is limited.

Sites A, B and C also lie win the vicinity of areas with probable long-term development potential although this is currently not recognized by the Town of Oakville Official Plan. The Parkway Belt West is located to the north and east of Sites A and C and the Oakville future urban boundary at Dundas Street is within approximately 1.0 km of the proposed Site Plan Areas B and C. Existing transit and utility corridors within the surrounding Parkway Belt West include TransCanada Pipelines and Interprovincial Pipeline Limited hydrocarbon pipelines, an existing and future Hydro transmission corridor and future Highway #403/407.

The Ministry of Transportation and Communications' five-year-plan for the extension of Highway #403 to Trafalgar Road and Highway #407 indicates the construction of a major transportation corridor across the north limits of the Town of Oakville. A major interchange is planned at the intersection of future Highway #403/407 and a smaller one at future Highway #403 and Trafalgar Road. This new corridor will effectively separate north Oakville from rural Milton, with Sites A, B and C falling between Highway #403 and the Oakville urban limit at Highway #5 (Dundas Street). In addition, this area lies within several alternative alignments for a long-range inter-regional rapid transit corridor (GO-ALRT, Northern Section).

Planned urban growth of the Town of Oakville is proceeding above Upper Middle Road toward Dundas Street in a phased, northward projection. Sites A, B and C occupy an "urban shadow" area, where the potential for future development nearby creates an unstable environment for sustaining long-term agricultural production.

Sites D and E occur within a more stable agricultural zone, where agricultural activities can be expected to continue over a longer term.

Differences between the general areas which contain Sites D and E compared to Sites A, B and C are indicated by the Enumeration Area (EA) data for the 1981 Census of Agriculture, as follows:

Site	EA Where Site is Located	Owner-Operated Farms (as percent of total number)	Farm Area Owner Operated (as percent of total farm area)	Farm Area Rented (as percent of total farm area)
A,B,C	#163	32%	4%	88%
D	#167/168	53%	16%	63%
E	#169	76%	26%	65%

The above data indicate trends in farm community stability. For example, Sites D and E are located in areas which have:

- a larger number of owner-operated farms;
- a greater proportion of the farm land area being owned by the farmers; and
- a lower percentage of farm area that is rented to tenant farmers.

3.1.1 Site Plan Area Rankings - Long Term Agricultural Viability

Based on the Long-term Agricultural Viability of operations, the following rankings for Site Plan Areas are evident:

Relatively Low Impact - A, B, C, F
Relatively High Impact - D, E

3.2 Level 2 - Land Quality; Large Contiguous Blocks of Agricultural Land; Types of Farm Enterprises

Each Site Plan Area was evaulated according to the three sub-factors (Table 1). Within each sub-factor, the various components were given a rating high (H), medium (M), or low (L), similar to that used in Stage 2B, as follows:

I Land Quality:

- o 80% + Class 1 = High (H)
- o 80% + Class $1^{6}3^{+4}$, 3 and 4 plus 1 + 2 combination = Moderate (M)

II Large Contiguous Blocks of Agricultural Land:

- o 80% Unfragmented (Large Parcel, Local or Non-Local Owner Combination) = High (H)
- o 50%-79% Unfragmented = Moderate (M)
- o 50% + Fragmented = Low (L)

III Special Farm Enterprises:

- o Intensive Livestock = High (H)
- o Cash Cropper Headquarters or Livestock Pasture = Moderate (M)
- o Hobby Farm or Non-Farm = Low (L)

TABLE 1

SITE PLAN AREA COMPARISON MATRIX: LAND QUALITY, LARGE CONTIGUOUS BLOCKS OF AGRICULTURAL LAND AND TYPES OF FARM ENTERPRISES

SUB-FACTOR	SITE PLAN AREA A	B	C	D	E	F
Land Quality						
Class 1 and 2	17%	21%	80%	5%	100%	12%
Class 3 and 4, and complexes of Class 1-3	83%	79%	20%	95%	--	43%
Class 5, 6, 7	--	--	--	--	--	45%
Rank	M	M	H	M	H	L
Large Contiguous Blocks of Agricultural Land						
Large Parcel, Local Owner	--	--	34%	15%	33%	--
Large Parcel, Non-Local Owner	94%	13%	--	62%	67%	37%
Fragmented	6%	87%	66%	23%	--	18%
Rank	H	L	L	M	H	L (45% non-agricultural)
Special Farm Enterprises						
Market Gardener	--	--	1 Commercial Nursery (C07)	--	--	--
Poultry, Beef or Hog Feeder	2 Livestock Operations (A11, A10)	3 Livestock Operations (B07, B15, B16)		--	1 Livestock Grazing Operation (E09)	--
Cash Cropper Headquarters	--	--	1 Cash Cropper (C08)	--	1 Cash Cropper (E06)	--
Rank	M	M	M	L	M	L

3.3 Overall Rankings

Combining the rankings obtained from the Level 1 sub-factor - Long Term Agricultural Viability (Section 3.1.1) and the Level 2 sub-factors (Table 1, Section 3.2), the following rankings are obtained.

Relatively Low Impact Group	Level 2 Sub-factors
A	MHM
B	MLM
C	HLM
F	LLL

Relatively High Impact Group	Level 2 Sub-factors
D	MML
E	HHM

Within the above groupings, the impacts rated in ascending order are: Site F - LLL; Site B - MLM; Site C - HLM; Site A - MHM; Site D - MML; and Site E - HHM.

Ranking of the Site Plan Areas from the most preferred to least preferred location for a landfill site is therefore as follows:

Ranking	Site Plan Area
1	F
2	B
3	C
4	A
5	D
6	E

Based on the foregoing, Site Plan Area F is recommended for location of the landfill, from the agricultural standpoint.

4.0 SITE REHABILITATION TO AN AGRICULTURAL AFTER-USE

Following completion of landfilling, the site must be rehabilitated to an appropriate after-use. The design requirements for site restoration vary according to the after-use chosen. If the site is to be returned to a productive agricultural after-use, then a number of specific requirements, as outlined below, should be built into the design.

4.1 Methane Gas Concerns

A number of instances have been reported of vegetation kills associated with landfill sites. The most common problem is the result of methane gas buildup in the soil, which displaces oxygen and causes anaerobesis. A review of data available on landfill sites indicates that vegetation kill is usually associated with:

- inadequate depth of surface cover and/or the use of pervious, coarse textured soils as overburden materials; and
- landfill sites which contain pervious sand and gravel beds within the subsoil strata.

Adequate design standards to overcome the surface gas kill problem require the use of sealers, most often compacted clay, placed between the landfill refuse and the topsoil/subsoil layer, followed by an adequate depth of overburden materials.

4.2 Mitigation Measures for Agricultural Rehabilitation

The following guidelines for mitigation address specific concerns for site restoration to an agricultural after-use:

- reduce the amount of water percolating into the landfill which contributes to leachate;
- prevent upward migration of metal contaminants into the plant root zone;
- prevent gas from migrating into the plant root zone; and
- provide an adequate rooting medium for plant growth.

A number of design requirements are necessary to ensure the above. These include:

1. Providing a seal, preferably clay, immediately over the final lift.

2. Providing an adequate topsoil/subsoil depth of 1-1.2m overlying the clay seal.

3. Contouring the final surface to provide for surface drainage (2-5% slopes) and the development of a microdrainage network for drainage of depressional areas created by differential subsidence.

4. Development of a passive gas venting system.

5. Progressive rehabilitation of the area with final grading and application of topsoil following after a period of 1-3 years to allow for subsidence.

6. Side slope grading to as low an angle as possible to reduce surface runoff and erosion, and to maximize the area available for arable crop production.

Following the application of topsoil, a post-rehabilitation management program should be implemented which includes the following:

1. Mechanical ripping of the topsoil/subsoil with a winged-tine agricultural subsoiler to alleviate soil compaction.

2. Addition of green manure and animal manure to the topsoil, together with standard fertilization to enhance soil productivity.

3. A cropping program consisting of a shallow rooting forage-legume system for a period of 3-5 years, followed by rotation with cash crops.

4. Development of specific guidelines for selection and planting of tree species consistent with landfill site conditions.

5. Implementation of a monitoring program to include assessment of soil subsidence, surface drainage, soil compaction, fertility, gas levels in the subsoil and crop establishment, with further mitigation applied as required.

5.0 PUBLIC RESPONSE AND AGENCY CONCERNS

5.1 Downstream Livestock Watering

Pubic enquiry expressed in Stage 2B responses and at Stage 2C workshops has indicated a concern for adequate mitigation, compensation or prevention of potential contamination of groundwater and surface streams from landfill leachate. The concern is over potential hazards to livestock, which in turn could affect the livelihood of livestock farmers who reside downstream of the landfill site.

The Halton Agricultural Advisory Committee (H.A.A.C.) has also expressed concern, and has sought guarantees from the Region for maintenance of adequate potable water for farm operations. Further to this end, H.A.A.C. has requested, by way of resolution, that an adequate contingency plan be implemented to provide safe, potable water in adequate supply for both livestock and residential needs.

Farms with livestock which have been identified within 800m of a Site Plan Area are as follows:

Site Plan Area	Map Reference to Downstream Farms Having Livestock Within Study Area (800m)
A	No livestock recorded
B	B02 - Hayes Farms - Beef B05 - Horses
C	C05 - Horses
D	D07 - Dairy D08, D09, D11 - Horses
E	E02 - Dairy E15, E16 - Beef E04, E13, E14, E17, E19 - Horses
F	No Livestock Recorded

The concern arises over the need for swift emergency action in the event of water supply contamination and support from the Region so that the affected individuals are not left with the dual burden of water supply loss and the necessity to provide their own contingency source of supply. Therefore,

some form of mutually agreeable contingency plan for emergency water supply should be sorted out between the Region and those constituents whose wells may be affected by the presence of a new landfill site.

5.2 Potential Bird Problems

Several concerns have been voiced by various members of the general public and by members of H.A.A.C. during meetings and workshops. The concerns most frequently stated are with disease, carried to local livestock by gulls and with damage to nursery, orchard or greenhouse products.

Of particular concern to a member of H.A.A.C. was the potential for gulls to carry salmonella spp. bacteria from contaminated garbage to a local farmstead, where the disease could be introduced to the livestock. In response to this concern, the hundred or more species of salmonella bacteria tend to be normal residents of our environment and only create problems when they infect unhealthy individuals. It is possible for a gull to carry salmonella bacteria on its feet or in its excrement to a feed or water trough on a local farm. However, the gull is low on the list of carriers, with infected humans or livestock being the best source of transport (personnel communication - Dr. M. Koller, Health of Animals Branch, Agriculture Canada).

Damage to agricultural crops caused by birds is well known. Robins were found to do the greatest damage to crops such as grapes and cherries, with grackles and starlings creating seasonal problems (Brown, 1974). In addition, red-winged blackbirds are known to cause severe damager to grain corn in the "milk" stage. Gulls have been known to damage tomato crops and young vegetable shoots, according to Blokpoel (1983), reporting in Gull Problems in Ontario. However, it is more likely that the former common rural birds will be the source of loss to the small fruit growers in the area.

Landowners who experience crop damage may obtain a special "kill" permit from the Canadian Wildlife Service in order to legally eliminate nuisance species which would otherwise be protected, such as robins or gulls.

APPENDIX A

Farm Inventory Sheets for Site Plan Areas

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. A-10 WW8301

LOCATION: Lot 9, Concession 2N (North of Burnhamthorpe Rd.)
1141 Burnhamthorpe Rd.

OWNER: Admath Holdings Ltd TENANT: Victor Fox

DESCRIPTION:

Acreage - 89 ac.

Barn - 2 wood frames - 1 poor condition, 1 fair condition

Outbuildings -

Silo -

Grain Bin - 1

Livestock - Poultry

Crops - Pasture, small grains

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. A-11 WW8301

LOCATION: Lot 8, Concession 2N (North of Burnhamthorpe Rd.)
1265 Burnhamthorpe Rd.

OWNER: H.O. Schultz TENANT:

DESCRIPTION:

Acreage - 5 ac.

Barn - Wood frame

Outbuildings -

Silo -

Grain Bin - 1

Livestock - Hogs

Crops - Mature apple orchard, oats, barley

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. B-07 WW8301

LOCATION: Lot 15, Concession 1N (East of Sixth Line Rd.)
3369 Sixth Line Rd.

OWNER: Margaret Lehockey TENANT: George Browne

DESCRIPTION:

Acreage - 21 ac.

Barn - Wood frame - fair condition

Outbuildings -

Silo - 1 uncapped

Grain Bin -

Livestock - Cattle (beef)

Crops - Pasture

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. B-13 WW8301

LOCATION: Lot 15, Concession 1N (South of Burnhamthorpe Rd.)
40 Burnhamthorpe Rd.

OWNER: W. Alcock TENANT:

DESCRIPTION:

Acreage - 10 ac.

Barn - Wood frame - good condition

Outbuildings -

Silo -

Grain Bin -

Livestock - Cattle (2 Holsteins)

Crops - Hay

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. B-15 WW8301

LOCATION: Lot 14, Concession 1N (South of Burnhamthorpe Rd.)
180 Burnhamthorpe Rd. E.

OWNER: Arnold & Corey Manders TENANT:

DESCRIPTION:

Acreage - 1 ac.

Barn - Metal frame - fair condition

Outbuildings -

Silo -

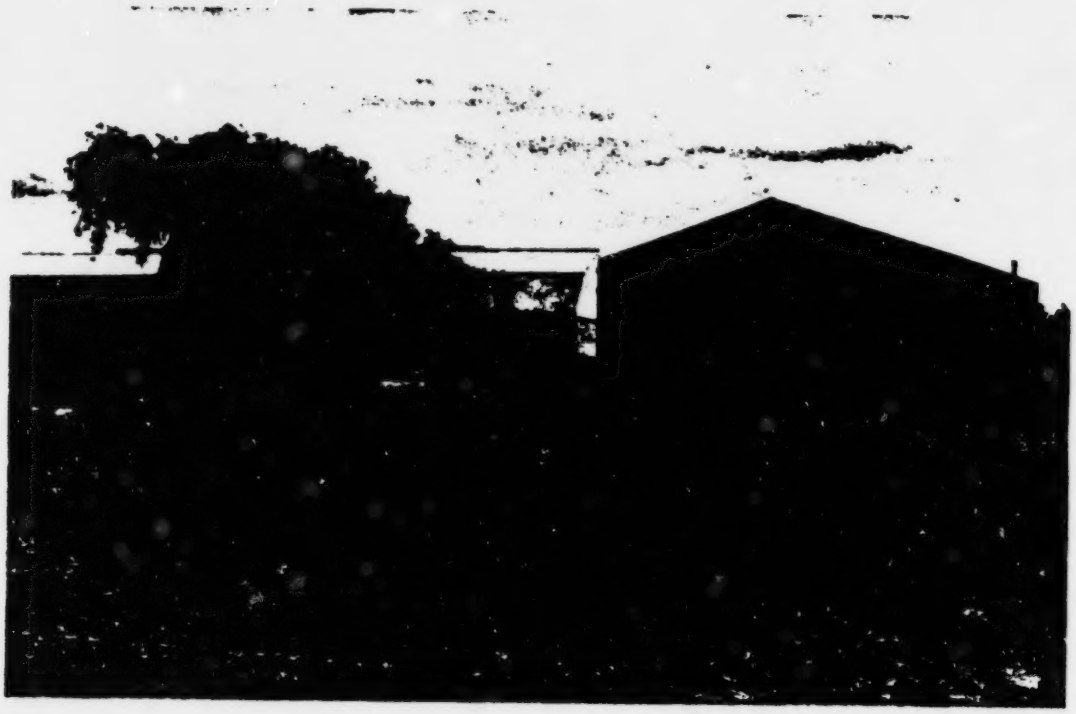
Grain Bin -

Livestock - Poultry (80,000-100,000/yr. broiler operation)

Crops -

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. B-16 WW8301



LOCATION: Lot 14, Concession 1N (South of Burnhamthorpe Rd.)
210 Burnhamthorpe Rd. E.

OWNER: S. Medeiros **TENANT:**

DESCRIPTION:

Acreage - 18 acres owned, 150 acres rented

Barn - metal frames - good condition

Outbuildings - Metal shed

Silo -

Grain Bin -

Livestock - Hogs, cattle, slaughterhouse

Crops - Hay, barley, oats, wheat

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. B-18 WW8301

LOCATION: Lot 13, Concession 1N (West of Trafalgar Rd.)
3444 Trafalgar Rd.

OWNER: Joseph Bentley TENANT:

DESCRIPTION:

Acreage - 5 ac.

Barn - Wood frame - fair condition

Outbuildings - Wood frame implement shed

Silo -

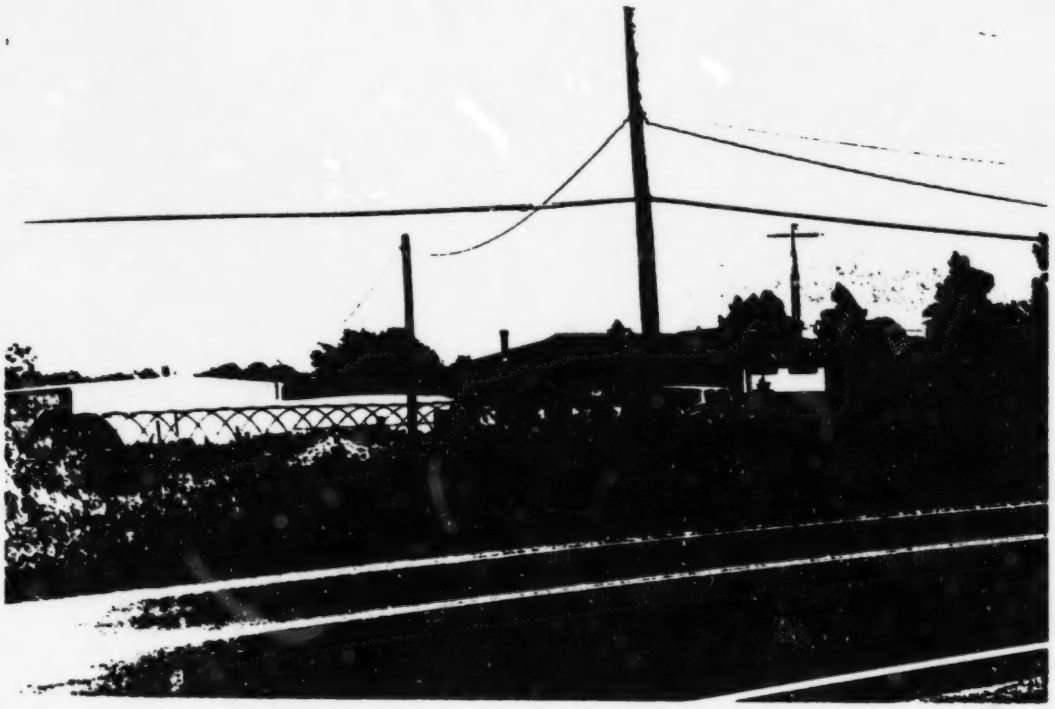
Grain Bin -

Livestock -

Crops - Hay

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. C-07 (G. & M. Farms) WW8301



LOCATION: Lot 12, Concession 1N (East of Trafalgar Rd.)
3301 Trafalgar Rd.

OWNER: G. & M. Ilczyszyn TENANT:

DESCRIPTION:

Acreage - 10 ac.

Barn -

Outbuildings - Greenhouses (2), metal shed

Silo -

Grain Bin -

Livestock -

Crops - Beans, vegetables, flowers

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. C-08 WW8301

LOCATION: Lot 12, Concession 1N (East of Trafalgar Rd.)
3371 Trafalgar Rd.

OWNER: Nina & Vladmir Shaparew TENANT: Wladislaw Salewski

DESCRIPTION:

Acreage - 86 ac.

Barn - Metal frame - fair condition

Outbuildings -

Silo -

Grain Bin -

Livestock -

Crops - Pasture

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. D-05 WW8301

LOCATION: Lot 3, Concession 2 (West of Hwy 25)
5406 Hwy 25

OWNER: Miller-Figa Investments Ltd. TENANT:

DESCRIPTION:

Acreage - 10 ac.

Barn - Wood frame - fair condition

Outbuildings -

Silo -

Grain Bin -

Livestock -

Crops - Barley

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. D-12 WW8301

LOCATION: Lot 3, Concession 2 (East of First Line Rd)
5357 First Line Rd.

OWNER: Clare F. Ford TENANT:

DESCRIPTION:

Acreage - 1 ac.

Barn - Wood frame - fair condition

Outbuildings -

Silo -

Grain Bin -

Livestock -

Crops - Beans

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. D-13 WW8301

LOCATION: Lot 4, Concession 2, (East of First Line Rd.)
5629 First Line Rd.

OWNER: W.T. Martin (Doreen & Watkin) TENANT: Dick Marshall

DESCRIPTION:

Acreage - 50 ac.

Barn -

Outbuildings - 2 airplane hangers

Silo -

Grain Bin -

Livestock -

Crops - Oats

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. E-06 WW8301

LOCATION: Lot 7, Concession 7 (West of Tremaine Rd.)
6270 Tremaine Rd.

OWNER: Mogil Properties Ltd. **TENANT:** William Estabrooks

DESCRIPTION:

Acreage - 102 ac.

Barn - Wood frame - fair condition

Outbuildings - Wood frame implement shed - fair condition

Silo -

Grain Bin -

Livestock -

Crops - Soybean

HALTON REGION LANDFILL ENVIRONMENTAL ASSESSMENT

FARM NO. E-07 WW8301

LOCATION: Lot 8, Concession 7, (West of Tremaine Rd.)
6400 Tremaine Rd.

OWNER: H. Vanzwol
(Helen & Henry)

TENANT: Van 2 Wal Trucking 6400
Treimaine Rd.

DESCRIPTION:

Acreage - 197 ac.

Barn - Wood frame - fair condition

Outbuildings - Wood frame shed

Silo -

Grain Bin - 1 steel

Livestock - beef calf feeder - finisher (spring-to-fall)

Crops - fenced pasture

APPENDIX B

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